



from research to reality

BRIEF

RESEARCH
DEVELOPMENT
&
TECHNOLOGY
TRANSFER

Integrating Local and Regional Planning into DOT Investment Decisions

Transportation planners need the “big picture”: the social, economic and environmental impacts of plans. The 1991 Intermodal Surface Transportation Efficiency Act, and its 1998 reauthorization, the Transportation Equity Act for the 21st Century, emphasize partnering with stakeholders and interest groups during planning. WisDOT believes in consistent, department-wide policies and procedures to help balance transportation needs and community goals, particularly since transportation investment can be a vital factor in local economics.

What's the Problem?

In previous years, WisDOT lacked a consistent methodology for integrating land use and economic development plans into real-world investment decisions. The need for this tool was evident:

- transportation funding will continue to operate under constrained budgets, which may mean less money for major projects;
- investment decisions have largely been based on needs generated by structural pavement decisions, bridge, rail crossing and capacity improvement needs; and
- economic and local land use goals have traditionally not been emphasized as much.

Research Objectives

WisDOT adopted a new strategic plan that served as a stimulus for this study. The economic development goal was to weigh state and local economic and land use goals in transportation investment decisions. WisDOT recommended three strategies: develop criteria that measure the impact of transportation alternatives on economic development; coordinate local development plans with department programs; and partner with other state agencies to link transportation decisions with economic development. Accordingly, the objectives of this study were to:

- inventory local and regional planning to help develop transportation investment strategies;
- develop regional economic profiles and forecasts to help district planning staff determine investments that would best accommodate economic activity;
- gather area development information to help local planners and development organizations improve their planning of economic development projects on or near existing and planned corridors;
- analyze the economic influence of adjacent Minnesota and Illinois counties on Wisconsin's land use planning and transportation. An economic forecasting and simulation model produced by Regional Economic Models, Inc. (REMI) was used.

Research Results

Information was organized according to district, since most state highway projects begin there. District profiles include data from interviews with local planners and economic development specialists. District economic activity was measured using six sets of data including Gross Regional Product, then compared to overall Wisconsin economic activity. The REMI model was used to forecast districts' fastest growing and high-growth industries in value-added dollars, and industries with high projected trucking demand.

Investigators

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WisDOT

**The Wisconsin
Department of
Transportation**

A sample projected land use map for each district, such as the one at right for Eau Claire County in Transportation District 6, is included in the research report. Similar maps for all counties in each district were provided to district staff as part of the outcome of this research project.

“WisDOT is placing a high priority on examining the transportation-land use relationship. We want to improve state-regional-local coordination of land use and transportation planning.”

- Dennis Leong,
WisDOT Economic
Development Section

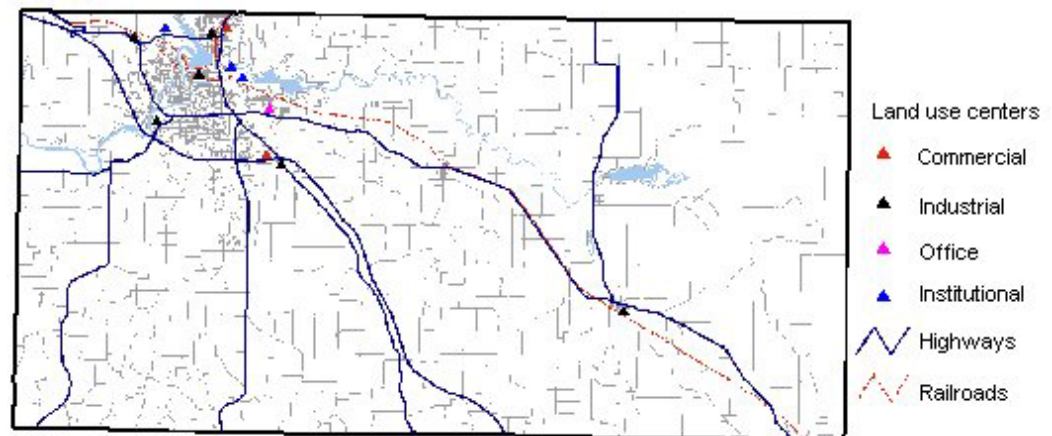
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Transportation
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Eau Claire County: Future Land Use



The Machinery & Computer Manufacturing and Electrical Equipment Manufacturing industries project the greatest growth in trucking over the 2000-2015 analysis period. Wholesale Trade, a large industry with major truck spending, will expand in all districts. Major corridors serving businesses in these industries will likely bear heavy increases in commercial trucking. The greatest employment growth will be in Services, with the Health/Medical, Business and Professional Services industries showing the largest percentage increases. Their growth will increase transportation demand by firms, staff and customers.

Implementation

WisDOT's Economic Planning and Development Section (EPDS) delivered transcripts of the interviews, economic forecasts and land use maps to each district Systems Planning and Operations Chief. Each received:

- data from the local interviews;
- descriptions of areas of anticipated economic growth and economic activity forecasts;
- electronic Geographic Information System (GIS) maps illustrating areas of expected economic growth. The maps were created using ArcView software, which is also used in the districts. Planners can lay maps of planned highway improvements over the GIS maps to evaluate and adjust plans for fair, predictable and cost effective development.

The findings were also shared with modal program managers to promote coordination of non-highway program activities with local and regional plans. EPDS will work with planners and investment managers to systematically review the land use plans and local economic goals. Managers and planners will evaluate the findings and incorporate them where applicable. By January 2002, two districts had already woven some of the study's findings into their six-year plans.

Additional Benefits

The study will benefit WisDOT transportation investment planning by aiding efforts to accommodate local development and transportation needs on both a project-specific and district-wide basis. Statewide data in the study will outline prominent area development issues and conflicts. This data will also help planners to anticipate where and what type of economic growth may occur in the future, and to develop appropriate transportation investment strategies that both accommodate and further stimulate regional economic activity.

For more information

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